



Muddying the Waters

## Student Experiment Sheet

Name \_\_\_\_\_

**Question:** How does sediment affect water quality?

**Prediction:**

I predict the sediment will

- ☐ sink to the bottom.
- ☐ float on the top.
- ☐ completely dissolve.
- ☐ be suspended in the water.

I predict the sediment will

- ☐ not change the clarity of the water.
- ☐ change the clarity of the water. In what way?

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**Procedures:**

1. Fill your jar with 500ml of tap water.
2. Add 50 ml of soil.
3. Use your stirrer to mix the contents of the jar completely.
4. Put the lid back on the jar.
5. Shake the jar well.
6. After 1 minute, 5 minutes, and 10 minutes:
  - a. Observe the clarity of the water in each zone. Record the level of clarity (*clear, somewhat clear, somewhat cloudy, cloudy, or very cloudy*) on the data sheet.
  - b. Draw a detailed picture of the jar in the boxes on the data sheet.

**Conclusions:**

1. Were your predictions correct or incorrect? Explain.

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2. What actually happened? Did the sediment sink, float, dissolve, or suspend in the water? Describe what happened.

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3. How did time affect the clarity of the water in each zone?

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4. How do you think sediment might affect fish and other aquatic life? Will the impact be different depending on where the organisms live?

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5. Based on what you have observed, could sediment in the Bay eventually change it physically? If so, explain how.

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